

WHAT IS CLAIMED IS:

1. An external rotor motor, comprising:
  - an inner stator (22) including a lamination stack (23) having a coating (76) at least partially covering it, said inner stator (22) being formed with an internal recess (36);
  - an external rotor (42);
  - a bearing support tube (38) having an inner side equipped with a bearing arrangement for journalling said external rotor, and having an outer side (98) to which said inner stator (22) is secured;
  - an annular securing disk (20) secured in said coating (76) of said lamination stack (23), said disk extending, at portions (34) of its inner periphery (48), into said internal recess (36) of the inner stator (22), said portions (34) serving as barbs (34') for engaging into said outer side (98) of said bearing support tube (38).
2. The external rotor motor of claim 1, wherein said annular securing disk (20) is formed of a ferromagnetic material and is arranged adjacent to said lamination stack (23) of the inner stator (22).
3. The external rotor motor of claim 1, wherein said annular securing disk (20) is arranged adjacent to said lamination stack (23) of the inner stator (22).
4. The external rotor motor of claim 1, wherein an outer surface (98) of said bearing support tube (38) is formed with a stop (100) and, upon mounting of said inner stator (22) onto said tube (22), said stator abuts against said stop (100).

5. The external rotor motor of claim 1, wherein said extending portions (34) of said securing ring (20) extend into said inner recess (36) of the inner stator;

said bearing support tube (38) has an exterior surface formed with a plurality of longitudinal guide grooves (102) which provide angular orientation to said extending portions (34) of said ring (20), said extending portions engaging as barbs (34') into said guide grooves (102).

6. The external rotor motor of claim 5, wherein at least one of said extending portions (34) has a width which corresponds to a width of an associated one of said guide grooves (102).

7. The external rotor motor of claim 1, further comprising fan blades (43) formed on an outer periphery of said external rotor (42).

8. The external rotor motor of claim 1, wherein said external rotor (42) has a diameter not exceeding 60 mm.

9. A fan having, as its drive motor, an external rotor motor comprising:

an inner stator (22) including a lamination stack (23) having a coating (76) at least partially covering it, said inner stator (22) being formed with an internal recess (36);

an external rotor (42);

a bearing support tube (38) having an inner side equipped with a bearing arrangement for rotatably supporting said external rotor (42), and having an outer side (98) to which said inner stator is secured;

an annular securing disk (20) secured in said coating (76) of said lamination stack (23), said disk extending, at portions (34) of its inner periphery (48), into said internal recess (36) of the inner stator (22), said portions (34) serving as barbs (34') for engaging into said outer side (98) of said bearing support tube (38).